

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P292701

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292701  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-40-A19/156-UNV-L92765-W2A1-U-5500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3769.0 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

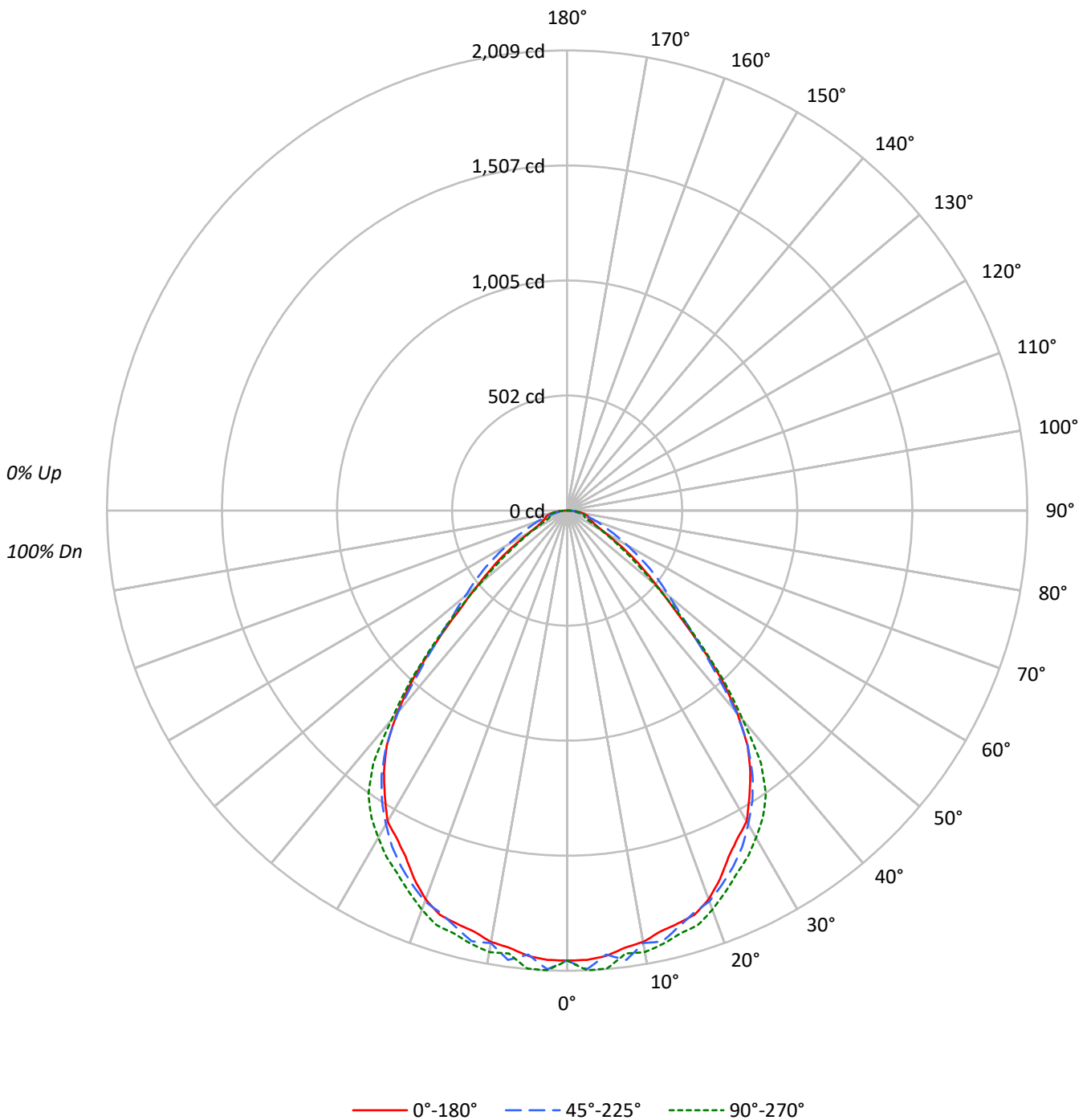
Input Watts (W): 33.294  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5286	5286	5286
5°	5273	5256	5421
10°	5224	5239	5348
15°	5200	5240	5324
20°	5172	5198	5310
25°	4952	5092	5197
30°	4870	4914	5124
35°	4580	4639	4968
40°	4058	4030	4189
45°	3032	3038	3123
50°	2134	2428	2067
55°	1575	2050	1412
60°	984	1620	922
65°	803	1284	644
70°	796	1069	636
75°	988	785	821
80°	1100	620	1004
85°	1096	1152	1124



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.0	5.0
10°-20°	532.6	14.1
20°-30°	788.8	20.9
30°-40°	883.6	23.4
40°-50°	649.3	17.2
50°-60°	362.9	9.6
60°-70°	202.3	5.4
70°-80°	118.8	3.2
80°-90°	43.7	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1508.4	40.0
0°-40°	2392.0	63.5
0°-60°	3404.2	90.3
0°-90°	3769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3769.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1964	1964	1964	1964	1964	
5°	1952	1988	1946	1986	2007	185
15°	1867	1878	1881	1909	1911	527
25°	1668	1681	1715	1739	1750	773
35°	1394	1395	1412	1476	1512	864
45°	797	861	798	855	820	622
55°	336	408	437	436	301	300
65°	126	224	202	258	101	130
75°	95	134	76	152	79	95
85°	36	52	37	48	36	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1964.3	1964.3	1964.3	1964.3	1964.3
2.5°	1963.4	1981.2	2004.3	2006.9	2008.7
5°	1951.9	1988.3	1945.6	1985.6	2006.9
7.5°	1925.2	1947.4	1978.5	1938.5	1950.1
10°	1911.9	1917.2	1917.2	1967.0	1957.2
12.5°	1881.7	1917.2	1926.1	1916.3	1937.7
15°	1866.6	1878.2	1880.8	1909.2	1911.0
17.5°	1849.7	1847.1	1840.9	1861.3	1897.7
20°	1806.2	1796.5	1815.1	1840.0	1854.2
22.5°	1742.3	1745.0	1767.2	1787.6	1803.6
25°	1667.7	1681.0	1714.8	1738.7	1750.3
27.5°	1611.8	1631.3	1654.4	1682.8	1705.9
30°	1567.4	1565.6	1581.6	1622.4	1649.1
32.5°	1481.2	1487.4	1504.3	1553.1	1590.4
35°	1394.2	1395.1	1412.0	1475.9	1512.3
37.5°	1293.8	1286.7	1296.5	1365.8	1389.7
40°	1155.3	1157.1	1147.3	1196.2	1192.6
42.5°	993.7	1007.9	957.3	1021.2	1016.8
45°	796.6	861.4	798.3	855.2	820.5
47.5°	628.7	724.6	672.2	714.0	649.1
50°	509.7	608.3	579.9	598.5	493.7
52.5°	418.3	498.2	507.1	511.5	385.4
55°	335.7	408.5	436.9	436.0	301.0
57.5°	247.8	332.1	365.0	378.3	228.2
60°	182.9	276.2	301.0	330.3	171.4
62.5°	147.4	242.4	248.6	289.5	130.5
65°	126.1	223.8	201.6	258.4	101.2
67.5°	111.9	208.7	164.3	230.9	86.1
70°	101.2	185.6	135.9	206.9	80.8
72.5°	98.6	158.1	104.8	184.7	79.9
75°	95.0	134.1	75.5	151.9	79.0
77.5°	81.7	114.6	54.2	117.2	73.7
80°	71.0	91.5	40.0	87.9	64.8
82.5°	55.1	69.3	35.5	66.6	52.4
85°	35.5	52.4	37.3	48.0	36.4
87.5°	16.9	29.3	26.6	25.8	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)